

United Nations Development Programme

Country: Georgia

Project Title: Tbilisi floods - Post-disaster needs assessment and risk-informed recovery

UNDAF Outcome(s): 3.1 1 Disaster risk reduction (DRR) is a national and local priority with an established, strong institutional basis for implementation

Expected CPAP Outcome(s): 3.1 Disaster risk reduction (DRR) is a national and local priority with an established, strong institutional basis for implementation

Expected CPAP Output(s): 3.1.1 Multi-hazard disaster management plans and procedures in place at national and regional levels

Executing Entity: UNDP

Implementing Agency: UNDP

Brief Description

During the torrential rains on 13-14 June, Tbilisi was hit by a major flash flood that wrought significant damage and caused loss of life through a large swath in the middle of the city. The flood took the lives of 19 people, with a handful still missing, and left 280 others homeless, destroying and damaging houses, roads and buildings across the central areas of the city closest to the Vere River. In response to the request from the Georgian Government (GoG) to UNDP and the WB, it was decided to assist the GoG in rapid post-disaster needs assessment, focusing not only on damages and losses but rather needs for short and medium term recovery.

Program Period: 2011-2015

Key Result Area (Strategic Plan) Recovery

Atlas Award ID:

Atlas output ID:

Start date: 26 June, 2015

End Date: 25 June, 2016

LPAC Meeting Date: N/A

Management Arrangements: DIM

Total Budget: US\$60,000

Allocated Resources:

- Regular

Other:

Trac 1.1.3

US\$ 60,000

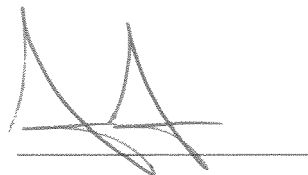
In kind contributions

Unfunded budget

Agreed by (UNDP)

Shombi Sharp

UNDP Resident Representative a.i.



2. SITUATION ANALYSIS

During the torrential rains on 13-14 June, Tbilisi was hit by a major flash flood that wrought significant damage and caused loss of life through a large swath in the middle of the city.

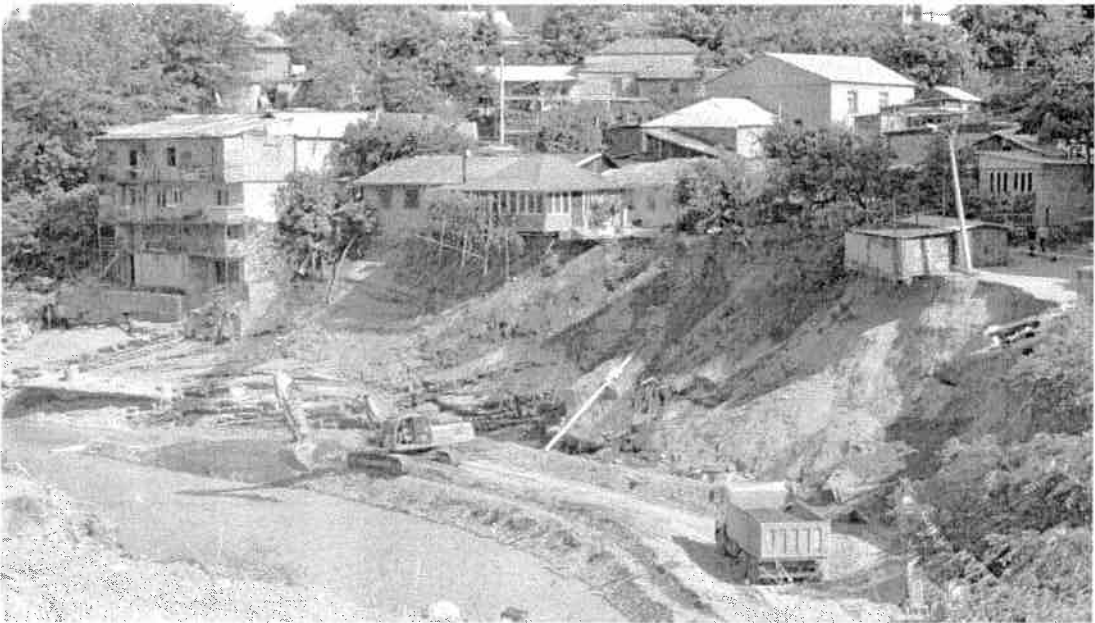
Following intense rain, a landslide occurred on the right slope of river Vere catchment area near the village of Akhaldaba (about 20km from capital Tbilisi). Approximately one million cubic meter of solid material slid from the slope and blocked river Vere creating a temporary damn that later broke, causing a sudden water level increase and inundation of areas with mudflow. The landslide first blocked the road connecting Tskneti and Betania, cutting off nearly 200 people in settlements nearby Tbilisi, and then rushed towards the capital, sweeping away cars and homes. The following areas were seriously damaged and destroyed by the flood: Vake-Saburtalo district (Svanidze street was seriously damaged), right bank of river Mtkvari, villages of Lisi, Tsodoreti, Napetvrebi, Bevreti, Tskaldidi, Betania-Tskneti area, Tetrtskaro Municipality. The Tbilisi Zoo was also flooded, with 3 Zoo staff and 1 rescuer losing their lives. Nearly half of the Zoo animals perished, while some 40 managed to escape into surrounding areas, including a hippopotamus and a number of predators, lions, tigers, bears and wolves, sending the residents into panic. The mudflow damaged the so called "Vere new-road", with the torrent carving large gaps in the road in two places. The disaster has destroyed or severely damaged houses located in the flood plain of the Vere river. The mudflow created serious threat to Tskneti street, washing out the riverbanks, as a result inhabitants of 13 Tskneti street were evacuated. Heroes square in the center of Tbilisi was fully submerged with damage as a result of the flash flood, causing traffic restrictions imposed by the city from 14 June to 16 June while debris removal and repairs took place¹.

To date we know the flood took the lives of 19 people, with a handful still missing, and left 280 others homeless, destroying and damaging houses, roads and buildings across the central areas of the city closest to the Vere River, the usually calm waterway that swelled unimaginably that night, quickly breaking its banks. Landslides and mudflows as far as 30 kilometers away in the catchment area of the Vere River made the rising tides even more deadly sending massive streams of mud, trees and other debris.

¹ An animated graphic of how the disaster unfolded (in Georgian), prepared by the National Environment Agency. www.facebook.com/video.php?v=886681254722179&set=yb.285690758154568&type=2&theater



Photos by: David Khizanishvili, UNDP



Photos by: David Khizanishvili, UNDP



Government Response

Emergency rescue operation started immediately, involving all rescue forces of Emergency Management Agency. All teams were quickly mobilized, though certainly such a quick and big-scale flash flood was not expected and access to sites was restricted. The Crisis Management Council under the PM's office was immediately activated to coordinate the response operation. This civic activism was much appreciated and solidarity of people encouraging.

According to information provided by Crisis Management Council and the GRCS situation reports, the following damages have been sustained: 19 people confirmed dead in Tbilisi, 6 people remain missing; Approximately 280 families are left homeless; Approximately 100 families lost their belongings (e.g. cars); Over 40 people, children among them, were taken to the hospitals for medical treatment.

The Council was responsible for overall coordination and decision-making regarding the response and relief operations, while *ad hoc* crisis response operation centers were established on the ground near the affected areas. In addition to the staff of the Tbilisi municipality services and rescuers of the Emergency Management Agency, military participated in relief and early recovery operations (cleaning impacted areas from debris). Volunteers from GRCS and local population were actively involved in cleaning of the area as well. However, it has to be mentioned that real time data and consolidated information on the situation had been poor and scarce.

Furthermore, there were certain issues raised on delayed rapid response during the emergency regarding prevention of breakage of artificial dam as well as on time early warning, alerting and evacuation of impacted population. Furthermore, some uncertainties regarding structural stability and rationale of newly build infrastructure (so called "new road") were emphasized by the government and relevant international experts were invited to study reasons of such consequences from the flooding.

However, it has to be mentioned that real time data and consolidated information on the situation had been poor and scarce. Updates from the Crisis Management Council were brief, general and through media and social networks, no official situation reports and assessments on humanitarian and recovery needs were produced and disseminated. However, Georgian Red Cross Society, has been sending brief updates on the immediate relief response organized through their volunteer network, as well as provide information on any immediate needs. Drown from very quick and general estimations, the Government organized first coordination /information meeting with the international community on 15 June where it highlighted several priorities that would require support from the donor community:

- Technical assistance (engineering and hydrogeology)
- Support to families and private sector that have occurred loss and damage
- Support to medium and longer term recovery of infrastructure

No detailed breakdown per sector/category was available on damages and losses, based on general calculations of the humanitarian and recovery needs, according to the government estimations damage might exceed 100 mln Georgian Lari. However, a thorough analysis should be done to assess the damage and losses, in which the Government requires support.

According to the government and Georgian Red Cross Society, all immediate needs of the affected population have been met. However, based on the request of the government, consultations meetings between the government, and country offices of the UN and the World Bank were conducted for arranging the unified assessment of the recovery needs. However, considering the localized scale of the disaster, it was agreed not to engage in a full-scale PDNA as such but rather 'light' post-disaster damage and recovery needs assessment. As was the case in July 2012, the UN and WB will join the forces to conduct such rapid assessment and assist the Government and donor community in coordinated effort for the risk-informed recovery planning.

Government needs

While works continue on the ground on relief operations, as of 18 June, the priorities identified by the government are as follows:

- *Immediate priorities:* locate the remaining 6 people that are still missing; restore the traffic; address urgent needs of displaced people; and ensure basic relief supplies are available to these persons;
- *Short/mid-term priority:* compensation to families (GEL10,000) who lost family members
- *Mid-term priorities:* full recovery of traffic; reconstruction of roads; solving housing issue of displaced persons
- *Long-term priority:* recovery of river banks, including areas around the zoo.

In addition, the Government has recognized need for recovery needs assessment and has requested international community to assist with such study. The UN and WB were approached to help in post-disaster damage and loss assessment as well as help with the preparation of a risk informed recovery plan. The UNCT was immediately mobilized and established link with the Crisis Management Council. UNHCR has provided some immediate relief assistance to 40 families, isolated in a village 10 km away from Tbilisi due to the landslide that damaged the road. UNDP took lead in joining effort with the WB for the joint recovery needs assessment. Moreover, UNDP's extensive work in support of the disaster risk

reduction and flood management is now used as building blocks for the planned exercise, and staff and experts from UNDP's ongoing projects will be used for further disaster risk management work.

While the Ministry of Finance was assigned a coordinator role with the donor community, number of international organization, including EU, DIPECHO, USAID have already made pledges to help with both financial and technical/expertise support. There are few other indications from bilateral donors to address recovery needs.

3. STRATEGY

In response to the request from the Georgian Government (GoG) to UNDP and the WB, it was decided to assist the GoG in rapid post-disaster needs assessment, focusing not only on damages and losses but rather needs for short and medium term recovery. The objective of this assessment is to carry out a rapid assessment of damage and flood losses, focusing on the main sectors that have been affected (urban infrastructure, housing, communications, etc). The joint UNDP/WB team will assist the GoG counterparts in preparation of the recovery and reconstruction programme for short-, medium- and long term horizon, including recommendations for future priorities and next steps for development of disaster risk mitigation and preparedness measures. The bottom line of the planned works is to ensure timely risk information is made available for the flood plain management and recovery actions are flood-resilient, and minimize potential damages and losses. Such early recovery efforts will improve the effectiveness and efficiency of recovery planning, and will allow better identification of further risks in the affected areas.

WB has already mobilized a team of 3 experts from its GFDRR facility. UNDP is expected to provide DRM specialists for assessing needs in flood risk management and overall DRM, in addition to already used in-house staff capacity.

In order to support the joint World Bank/UNDP led needs assessment, the following inputs will be required but not limited to: international and national experts in the field of recovery assessment and coordination work, as well as integrating DRR into urban development planning over the medium range, i.e. expertise in risk assessment, land-use planning, early warning systems and preparedness.

Project outputs and activities

Output 1: Post-disaster recovery needs assessment and recovery framework and plans developed

Indicative activities:

Activity 1.1 Recovery needs assessment and framework development:

- Develop assessment team ToR, detailed work plan, hire/mobilize experts to assist with recovery needs assessment, develop for the joint GoG/WB/UNDP assessment;
- Conduct regular needs assessment workshops and meetings of the team to share and collect required data and information;
- Conduct recovery needs assessment to compliment WB technical support, focusing on flood plain management, hydro-geological hazard and risk assessment, disaster risk prevention and environment degradation categories;
- Collection, analysis and digitalization of hydrological and geological data on Tbilisi, including Vere river basin (to be implemented through other CO project as complementary work);

- Flood and geological hazard risk mapping of Tbilisi area, including Vere river basin(to be implemented through other CO project as complementary work) ;
- Development of hydraulic model based on the selected datasets(to be implemented through other CO project as complementary work);
- Based on this model, undertake high level risk assessment (number of properties, critical infrastructure, population) and develop risk maps;
- Facilitate and coordinate elaboration of recovery framework focusing on hazard mapping floodplain management, environment degradation and disaster risk reduction issues

Output 2: Coordination over risk-informed recovery planning and framework development ensured

Activity 2: Coordination of recovery efforts:

- Conduct introductory meeting with interested donor community to inform about planned post disaster recovery needs assessment and agree on the sectors and areas to be assessed and as identified in consultations with GoG;
- Presentation of the findings of the assessment and later the framework to Government and donor community;
- Identification and registering the activities to be implemented by the other stakeholders to ensure complementarity of actions;
- Conduct regular meetings with donor community and Government in order to identify the progress of recovery efforts under the framework

3. RESULTS AND RESOURCE FRAMEWORK

Intended outcome as stated in the Country Programme Results and Resource Framework: 3.1 Disaster risk reduction (DRR) is a national and local priority with an established, strong institutional basis for implementation.

Outcome indicators as stated in the Country Programme Results Framework, including baseline and targets:

Applicable Key Result Area: Recovery

Partnership Strategy: DIM, in partnership with National Environmental Agency/ Ministry of Environment and Natural resources Protection; State Security and Crises Management Council, PM's Office, and Tbilisi City Hall

Project title and ID: to be added

INTENDED OUTPUTS	OUTPUT TARGETS (YEAR)	INDICATIVE ACTIVITIES	RESPONSIBLE PARTIES	INPUTS
<p>OUTPUT1:</p> <p>Post-disaster recovery needs assessment and recovery framework and plans developed</p> <p>Baseline 1.1: Insufficient government capacities to conduct long-term recovery needs assessment and develop recovery framework</p> <p>Baseline 1.2: Lack and/or insufficient hazard data for Tbilisi;</p> <p>Baseline 1.3: Lack of updated hydrological and geological</p>	<p>Target year 2015</p> <p>a. Post-disaster recovery needs assessment team established;</p> <p>b. Recovery needs assessment conducted</p> <p>c. Recovery framework and plans developed</p> <p>1.2 Hazard data collected and digitalized;</p> <p>1.3 Hazard maps developed/updated</p> <p>1.4 Regular</p>	<p>Activity 1.1 Recovery needs assessment and framework development:</p> <ul style="list-style-type: none"> - Develop assessment team ToR, detailed work plan, hire/mobilize experts to assist with recovery needs assessment, develop for the joint GoG/WB/UNDP assessment; - Conduct regular needs assessment workshops and meetings of the team to share and collect required data and information; - Conduct recovery needs assessment to complement WB technical support, focusing on flood plain management, hydro-geological hazard and risk assessment, disaster risk prevention and environment degradation categories; - Collection, analysis and digitalization of hydrological and geological data on Tbilisi, including Vere river basin 	<p>UNDP/WB/GoG, Tbilisi Municipality</p>	<p>International and local consultancy + travel -US\$25,000,</p> <p>International and local consultancy + travel -US\$15,000,</p> <p>Contractual services (transport, logistics, catering)- US\$5,000</p> <p>Translation and conference services – US\$5,000</p> <p>Sub-total – US\$50,000</p>

<p>hazard risk mapping of the city</p> <p>Indicator: Recovery needs assessment report produced</p>	<p>coordination meetings with stakeholders;</p> <p>1.5 Short-medium term recovery framework produced as an annex to the needs assessment report;</p> <p>Target year 2016</p> <p>3.2 Hydraulic and geological models developed;</p> <p>3.3 Risk Maps developed;</p>	<p>(through other CO resources as a complementary activity);</p> <ul style="list-style-type: none"> - Flood and geological hazard risk mapping of Tbilisi area, including Vere river basin (through other CO resources as a complementary activity); - Development of hydraulic model based on the selected datasets (through other CO resources as a complementary activity); - Based on this model, undertake high level risk assessment (number of properties, critical infrastructure, population) and develop risk maps; - Facilitate and coordinate elaboration of recovery framework focusing on hazard mapping floodplain management, environment degradation and disaster risk reduction issues 	<p>local consultancy + travel -US\$4,000,</p> <p>Contractual services (transport, logistics, catering)- US\$2,000</p> <p>Translation, printing and conference services – US\$4,000</p>
<p>OUTPUT 2 Coordination over risk-informed recovery planning and framework development ensured</p> <p>Baseline 2 Limitations in coordination and the Government on implementation of the short-to medium term recovery efforts;</p>	<p>Target 2015 regular situation and progress reports over implementation of the recovery framework</p> <p>Target 2016 regular situation and progress reports over</p>	<p>Activity 2: Coordination of recovery efforts:</p> <ul style="list-style-type: none"> - Conduct introductory meeting with interested donor community to inform about planned post disaster recovery needs assessment and agree on the sectors and areas to be assessed and as identified in 	<p>UNDP/WB/donor community/GoG</p>

<p>inaccurate/ limited information of various datasets, cases of duplication of efforts; Government request to assist with the coordination</p> <p>Indicator 2.1 Progress and situation reports on implementation of recovery framework actions exist - Y/N</p>	<p>Implementation of the recovery framework</p>	<ul style="list-style-type: none"> - consultations with GoG; Presentation of the findings of the assessment and later the framework to Government and donor community; - Identification and registering the activities to be implemented by the other stakeholders to ensure complementarity of actions; - Conduct regular meetings with donor community and Government in order to identify the progress of recovery efforts under the framework 	<p style="text-align: right;">Sub-total - USD 10,000</p>
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4. ANNUAL WORK PLAN

Year 2015

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESP. PARTY	PLANNED BUDGET/USD		Budget Description	Amount
		Q 1	Q 2	Q 3	Q 4		Fund	Donor		
ACTIVITY 1: Post-disaster recovery needs assessment	International Consultants		x			UNDP		71200 – International Short-term consultants	34,650	
	Local consultants			x		UNDP		71300 Local short term consultants	5,100	
	Travel			x		UNDP		71600 Travel	5,000	
	Contracts/conference/translation/editing			x		UNDP		72100 Contractual services-companies	3,000	
ACTIVITY 2: Coordination over risk-informed recovery planning and framework	Printing			x		UNDP		74200 Audio Visual&Print Prod Costs	2,250	
	Contracts			x		UNDP		72100 Contractual services-companies	2,500	
	TOTAL								52,500	

Year 2016

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESP. PARTY	PLANNED BUDGET/USD		Budget Description	Amount
		Q 1	Q 2	Q 3	Q 4		Fund	Donor		
ACTIVITY 2: Coordination over risk-informed recovery planning and framework	Local consultants	x	x			UNDP		71300 Local short term consultants	4,000	
	Contracts					UNDP		72100 Contractual services-companies	3500	
	TOTAL								7,500	

5. MANAGEMENT ARRANGEMENTS

UNDP will use its in-house capacity of project staff and experts for engaging in needs assessment works as well as development of recovery framework. Ongoing DRR projects knowledge, experience and tools will be used for the implementation of this project. Thus, there will be a cross-fertilization of efforts and assets between this proposed activities and ongoing work of UNDP.

The funds will be managed through UNDP Georgia in accordance with the standard arrangements of direct implementation modality mechanisms.

6. MONITORING FRAMEWORK AND EVALUATION

In accordance with the programming policies and procedures outlined in the UNDP User Guide, the project will be monitored through the following:

Within the annual cycle

- On a quarterly basis, a quality assessment shall record **progress** towards the completion of key results, based on quality criteria and methods captured in the Quality Management table below.
- An **Issue Log** shall be activated in Atlas and updated by the Environment and Energy Portfolio Team Leader and/or Economic Development Portfolio Team Leader to facilitate tracking and resolution of potential problems or requests for change.
- Based on the initial risk analysis submitted (see annex 1), a **risk log** shall be activated in Atlas and regularly updated by reviewing the external environment that may affect the project implementation.
- Based on the above information recorded in Atlas, a **Quarterly Progress Reports (QPR)** shall be submitted by Environment and Energy Portfolio Team Leader and/or Economic Development Portfolio Team Leader, using the standard report format available in the Executive Snapshot.
- a project **Lesson-learned log** shall be activated and regularly updated to ensure on-going learning and adaptation within the organization, and to facilitate the preparation of the Lessons-learned Report at the end of the project
- a **Monitoring Schedule Plan** shall be activated in Atlas and updated to track key management actions/events

Annually

- **Annual Review Report.** An Annual Review Report shall be prepared by the Project Manager and shared with the Project Board. As minimum requirement, the Annual Review Report shall consist of the Atlas standard format for the QPR covering the whole year with updated information for each above element of the QPR as well as a summary of results achieved against pre-defined annual targets at the output level.
- **Annual Project Review.** Based on the above report, an annual project review shall be conducted during the fourth quarter of the year or soon after, to assess the performance of the project and appraise the Annual Work Plan (AWP) for the following year. In the last year, this review will be a final assessment. This review is driven by the Project Board and may involve other stakeholders as required. It shall focus on the extent to which progress is being made towards outputs, and that these remain aligned to appropriate outcomes.

7. LEGAL CONTEXT

This document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together a Project Document as referred to in the SBAA and all CPAP provisions apply to this document.

Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.

The implementing partner shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>.

This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document".

ANNEXES:

ANNEX 1: RISK ANALYSIS

Project Title: Tbilisi floods - Post-disaster needs assessment and risk-informed recovery	Award ID:
	Date:

Description	Category	Impact & Probability	Countermeasures / Mngt response	Owner	Author	Date Identified	Last Update	Status
1 Potential government reshuffle	POLITICAL	Programme implications: • Delay roll out of planned activities and implementation P=2/1=4	Management response: • Close monitoring and continuous (formal and informal) contact with government stakeholders at all levels to understand and incorporate changing priorities in the project;	E&E portfolio team leader/	Nino Antadze/			
2 Lack or inadequate in-kind contribution from government	OPERATIONAL	Programme implications: • Delay roll out of planned activities and implementation P=1/1=3	Management response: • Advocacy and negotiations with relevant government representatives	E&E portfolio team leader/	Nino Antadze/			
3 Lack or inadequate Government ownership and commitment	OPERATIONAL	Programme Implications: • Delay roll out of planned activities and implementation • No appreciation of works undertaken by the project P=1/1=4	Management Response: • Programme activities designed in close partnership with relevant government stakeholders • Management arrangements designed to mitigate the risk	E&E portfolio team leader/	Nino Antadze/			